



Contribution ID: 30

Type: **not specified**

Keynote: Fugaku: the First “Applications First” Exascale Supercomputer and Beyond

Thursday, 23 September 2021 08:20 (1 hour)

Fugaku was developed with the “application first” philosophy, aiming to achieve up to 100x speedup over its predecessor, the K-computer, while being extremely general purpose via the adoption of the Arm instruction set. In order to attain its performance requirement while being power efficient, the design emphasized low power circuit designs, while realizing extreme high bandwidth via the use of HBM2 and the Tofu-D network, which embeds high performance network switch on every one of its 160,000 nodes. The resulting machine is very well balanced, accommodating extreme high bandwidth, appropriate for climate and meteorological applications. It is expected that Fugaku will be a platform to innovate such areas, for safety and sustainability of the society

Primary author: MATSUOKA, Satoshi (Riken Center for Computational Science)

Presenter: MATSUOKA, Satoshi (Riken Center for Computational Science)

Session Classification: Session 7

Track Classification: 19th Workshop on high performance computing in meteorology